

# HIGH DOSE CYTARABINE

Consolidation chemotherapy for AML

Drugs/Dosage:	<b>Cytarabine</b> Age < 60 yrs    3000mg/m <sup>2</sup> IV                      twice daily (every 12 hours) on Days 1, 3 and 5 (6 doses in total) Age ≥ 60 yrs    1000mg/m <sup>2</sup> IV                      twice daily (every 12 hours) on Days 1, 3 and 5 (6 doses in total)
Administration:	each dose in 500ml 0.9% sodium chloride 0.9% and infused over 4 hours
Other Drugs:	Corticosteroid eye drops e.g. Maxidex: one drop into each eye every 4 hours during high-dose cytarabine, and continuing for 5 days after cytarabine completed (10 days total) Posaconazole to be taken during each cycle of chemotherapy, only when neutrophils drop to < 0.5x10 <sup>9</sup> /L and until they are > 0.5x10 <sup>9</sup> /L. Consider aciclovir prophylaxis (400mg bd), especially if history of VZV or HSV reactivation
Frequency:	either one or two cycles, with each cycle to be given only if neutrophils ≥ 1.0 x 10 <sup>9</sup> /L and platelets ≥ 100 x 10 <sup>9</sup> /L
Main Toxicities:	prolonged (> 7 days) myelosuppression, with risk of infections and haemorrhage (see Comments); alopecia; cytarabine syndrome (includes fever, myalgia, bone pain, rash and conjunctivitis); mucositis; ovarian failure; infertility
Anti- emetics:	highly emetogenic on days 1 - 5
Extravasation:	non-vesicant
Regular Investigations:	FBC                      alternate days until neutropenia or thrombocytopenia occur, then daily until recovery U&Es                      Day 1, then 3 x weekly LFTs                      Day 1, then 3 x weekly Mg <sup>2+</sup> and Ca <sup>2+</sup> Day 1, then weekly
Comments:	This regimen causes prolonged myelosuppression, which should be supported according to local policies, including those for neutropenic sepsis, the use of blood products and isolation.

## Dose Modifications

Haematological Toxicity:	Proceed with treatment only once neutrophils ≥ 1.0 x 10 <sup>9</sup> /L and platelets ≥ 100 x 10 <sup>9</sup> /L. Delay in count recovery after treatment should be managed according to local protocols / practice.
Renal Impairment:	No dose reductions required

Reason for Update: posaconazole tablets available; suspension dose removed	Approved by Chair of Alliance TSSG: Dr A Laurie
Version:3	Date: 16.3.15
Supersedes: Version 2	Review date: April 2017
Prepared by: S Taylor	Checked by: C Tucker

Hepatic Impairment:

<b>Bilirubin(<math>\mu\text{mol/L}</math>)</b>	<b>Cytarabine Dose</b>
> 34	Give 50% dose

Patient Information: Macmillan leaflet for Cytarabine

References: AML 17 trial, Version 5 May 2010  
Dosing for over 60s taken from MD Anderson dose reduction advice (Thomas, DA et al; JCO 1999; 17 (8): p2461)

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